PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Original) A method of receiving data in a wireless communication system, the method comprising:

processing received signals through a RAKE processing element to generate RAKE processed signals;

measuring a first quality metric of the RAKE processed signals;

comparing the first quality metric of the RAKE processed signals to a first threshold value; and

when the first quality metric exceeds the first threshold value, enabling an equalizer.

2. (Original) The method of claim 1 further comprising:

measuring a correction metric of the RAKE processed signals; and

comparing the correction metric to a second threshold value,

wherein enabling the equalizer further comprises:

when the first quality metric exceeds the first threshold value and the correction metric exceeds the second threshold value, enabling an equalizer.

3. (Original) The method of claim 2, wherein the first quality metric is a signal to noise ratio.

4. (Original) The method of claim 2, wherein the correction metric is a cross-correlation measure.

5. (Original) The method of claim 4, wherein the cross-correlation is measured between pilot bursts.

6. (Currently Amended) The method of claim 2, wherein after enabling the equalizer:

the method further comprises:

measuring [[the]] a first quality metric of the equalizer processed signals;

measuring a next quality metric of the RAKE processed signals;

comparing the first quality metric of the equalizer processed signals to the ~~first~~ next quality metric of the RAKE processed signals; and

when the first quality metric of the equalizer processed signals is less than the ~~first~~ next quality metric of the RAKE processed signals disabling the equalizer.

7. (Currently Amended) A method of receiving data in a wireless communication system, the method comprising:

processing received signals through a RAKE processing element to generate RAKE processed signals; and

periodically testing operating conditions by initiating a test mode once in a sample period, comprising:

processing received signals through an equalizer to generate equalizer processed signals;

measuring a first quality metric of the RAKE processed signals;

measuring the first quality metric of the equalizer processed signals;

comparing the first quality metric of the RAKE processed signals to the first quality metric of the equalizer processed signals; and

determining whether to enable the equalizer based on the comparison, wherein the sample period is sufficient to allow data to traverse the filter elements of the equalizer.

8. (Original) The method of claim 7, wherein if the first quality metric of the RAKE processed signals exceeds the first quality metric of the equalizer processed signals by a margin amount, then determining whether to enable the equalizer based on the comparison comprises determining to disable the equalizer.

9. (Original) The method of claim 8, wherein if the first quality metric of the RAKE processed signals does not exceed the first quality metric of the equalizer processed signals by the margin amount, then determining whether to enable the equalizer based on the comparison comprises determining to enable the equalizer.

10. (Original) The method of claim 9, wherein the first quality metric is a signal to interference and noise ratio.

11. (Original) The method of claim 10, wherein when the equalizer is enabled, the method further comprises:

terminating testing;

processing received signals through the equalizer to generate equalizer processed signals;

measuring the first quality metric of the RAKE processed signals;

measuring the first quality metric of the equalizer processed signals;

comparing the first quality metric of the RAKE processed signals to the first quality metric of the equalizer processed signals; and

determining whether to disable the equalizer based on the comparison.

12. (Original) The method of claim 11, wherein if the first quality metric of the RAKE processed signals exceeds the first quality metric of the equalizer processed signals by a margin amount, then determining whether to disable the equalizer based on the comparison comprises determining to disable the equalizer.

13. (Original) The method of claim 12, wherein if the first quality metric of the RAKE processed signals does not exceed the first quality metric of the equalizer processed signals by the margin amount, then determining whether to disable the equalizer based on the comparison comprises determining to enable the equalizer.

14. Cancelled.

15. (Original) An apparatus for receiving data in a wireless communication system, the method comprising:

means for processing received signals through a RAKE processing element to generate RAKE processed signals;

means for measuring a first quality metric of the RAKE processed signals;

means for comparing the first quality metric of the RAKE processed signals to a first threshold value; and

means for enabling an equalizer when the first quality metric exceeds the first threshold value.

16. (Currently Amended) ~~A receiver in~~ A computer program product in a wireless communication system, ~~the receiver~~ comprising:

~~processing element for processing computer-readable instructions; and~~

~~memory storage device adapted to store computer-readable instructions~~ computer readable medium comprising:

~~a first set of computer-readable instructions for processing~~ code for causing a computer to process received signals through a RAKE processing element to generate RAKE processed signals;

~~a first set of computer-readable instructions for measuring~~ code for causing a computer to measure a first quality metric of the RAKE processed signals;

~~a first set of computer-readable instructions for comparing~~ code for causing a computer to compare the first quality metric of the RAKE processed signals to a first threshold value; and

~~a first set of computer-readable instructions for enabling~~ code for causing a computer to enable an equalizer when the first quality metric exceeds the first threshold value.

17. (Original) An apparatus for receiving data in a wireless communication system, the apparatus comprising:

means for processing received signals through a RAKE processing element to generate RAKE processed signals; and

means for periodically testing operating conditions, comprising:

means for processing received signals through an equalizer to generate equalizer processed signals;

means for measuring a first quality metric of the RAKE processed signals;

means for measuring the first quality metric of the equalizer processed signals;

means for comparing the first quality metric of the RAKE processed signals to the first quality metric of the equalizer processed signals; and

means for determining whether to enable the equalizer based on the comparison.

18. (Currently Amended) ~~A receiver in~~ A computer program product in a wireless communication system, ~~the receiver~~ comprising:

~~processing element for implementing computer-readable instructions; and~~

~~memory storage device for storing computer-readable instructions for~~ computer-readable medium comprising:

code for causing a computer to process ~~processing~~ received signals through a RAKE processing element to generate RAKE processed signals; and

code for causing a computer to periodically ~~testing~~ test operating conditions when a test mode is initiated once in a sample period by:

processing received signals through an equalizer to generate equalizer processed signals;

measuring a first quality metric of the RAKE processed signals;

measuring the first quality metric of the equalizer processed signals;

comparing the first quality metric of the RAKE processed signals to the first quality metric of the equalizer processed signals; and

determining whether to enable the equalizer based on the comparison.

19. (Currently Amended) A wireless communication apparatus, comprising:

a RAKE receiver in a first signal processing path, the RAKE receiver adapted to receive a signal and generate an estimate of the received signal;

an equalizer in a second processing path, operably connected in parallel to the RAKE receiver; and

an equalization controller adapted to control operation of the equalizer in response to the estimate from the RAKE receiver.

20. (Original) The apparatus as in claim 19, wherein the equalization controller enables the equalizer when a channel quality measure of the estimate is above a threshold value.

21. (Original) The apparatus as in claim 20, wherein the equalization controller enables the equalizer when the channel quality measure of the estimate is above the threshold and a first correlation of the estimate is greater than a second correlation of an equalized estimate generated by the equalizer.

22. (Original) The apparatus as in claim 21, wherein the first correlation and the second correlation are based on received pilot signals.

23. (Original) The apparatus as in claim 19, wherein the equalization controller disables the equalizer when a channel quality measure of the estimate from the RAKE receiver is greater than a channel quality measure of an equalized estimate generated by the equalizer.

24. (Original) The apparatus as in claim 19, wherein the equalization controller periodically enables the equalizer to compare an equalized estimate generated by the equalizer to the estimate from the RAKE receiver.

25. (Original) The apparatus as in claim 24, wherein the equalization controller compares channel quality measures of the equalized estimate generated by the equalizer and the estimate from the RAKE receiver.

26. (Currently Amended) The apparatus as in claim 24, wherein the equalization controller compares channel velocity of the equalized estimate generated by the equalizer and the estimate from the RAKE ~~receiver~~ receiver.

27. (Original) The apparatus as in claim 19, wherein the equalizer is adapted to operate in a first operating mode and in a second test mode when enabled.

28. (Original) The apparatus as in claim 27, wherein the equalizer transitions from the second test mode to the first operating mode when a channel quality measure of an equalized estimate generated by the equalizer is greater than a channel quality measure of the estimate from the RAKE receiver.

29. (Original) The apparatus as in claim 28, wherein the equalization controller disables the equalizer when a signal-to-noise ratio of the estimate from the RAKE receiver is greater than an equalized estimate from the equalizer.

30. (Original) The apparatus as in claim 19, wherein the apparatus has two operating modes, comprising:

a first mode wherein the RAKE receiver is enabled and the equalizer is disabled;

a second mode wherein the RAKE receiver and equalizer are enabled.

31. (Original) The apparatus as in claim 19, wherein the apparatus is adapted for two configurations, comprising:

a first configuration wherein the RAKE receiver is enabled and the equalizer is disabled;

a second configuration wherein the RAKE receiver and equalizer are enabled.

32. (Original) The apparatus as in claim 30, wherein the apparatus has a third operating mode, comprising:

a test mode wherein the equalizer is enabled for a sample period and an equalized estimate compared to the estimate from the RAKE receiver.